

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 10/15/1993 are:

A. ☐ approved by the Draftsperson under 37 CFR 1.84 or 1.152.

B. ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

<p>1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink. Color. Color drawings are not acceptable until petition is granted. Fig(s) _____ Pencil and non black ink not permitted. Fig(s) _____</p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b) 1 full-tone set is required. Fig(s) _____ Photographs may not be mounted. 37 CFR 1.84(c) Poor quality (half-tone). Fig(s) _____</p> <p>3. TYPE OF PAPER. 37 CFR 1.84(e) Paper not flexible, strong, white, and durable. Fig(s) _____ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) _____ Mylar, velum paper is not acceptable (too thin). Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: <input checked="" type="checkbox"/> 21.0 cm by 29.7 cm (DIN size A4) <input checked="" type="checkbox"/> 21.6 cm by 27.9 cm (8 1/2 x 11 inches) All drawing sheets not the same size. Sheet(s) _____ Drawings sheets not an acceptable size. Fig(s) _____</p> <p>5. MARGINS. 37 CFR 1.84(g): Acceptable margins: Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: A4 Size Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: 8 1/2 x 11 Margins not acceptable. Fig(s) <u>ALL</u> <input checked="" type="checkbox"/> Top (T) <input checked="" type="checkbox"/> Left (L) <input checked="" type="checkbox"/> Right (R) <input checked="" type="checkbox"/> Bottom (B)</p> <p>6. VIEWS. 37 CFR 1.84(h) REMINDER: Specification may require revision to correspond to drawing changes. Partial views. 37 CFR 1.84(h)(2) Brackets needed to show figure as one entity. Fig(s) _____ Views not labeled separately or properly. Fig(s) _____ Enlarged view not labeled separately or properly. Fig(s) _____</p> <p>7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3) Hatching not indicated for sectional portions of an object. Fig(s) _____ Sectional designation should be noted with Arabic or Roman numbers. Fig(s) _____</p>	<p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k) Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(i) <input checked="" type="checkbox"/> Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) <u>ALL</u></p> <p>11. SHADING. 37 CFR 1.84(m) Solid black areas pale. Fig(s) _____ Solid black shading not permitted. Fig(s) _____ Shade lines, pale, rough and blurred. Fig(s) _____</p> <p>12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p) <input checked="" type="checkbox"/> Numbers and reference characters not plain and legible. Fig(s) <u>1, 10, 12B, 13, 14, 37, 38-45</u> <input checked="" type="checkbox"/> Figure legends are poor. Fig(s) <u>6, 8, 12A, 13, 14, 10</u> Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____ English alphabet not used. 37 CFR 1.84(p)(2) Fig(s) _____ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q) Lead lines cross each other. Fig(s) _____ Lead lines missing. Fig(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t) Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u) Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____</p> <p>16. CORRECTIONS. 37 CFR 1.84(w) Corrections not made from prior PTO-948 dated _____</p> <p>17. DESIGN DRAWINGS. 37 CFR 1.152 Surface shading shown not appropriate. Fig(s) _____ Solid black shading not used for color contrast. Fig(s) _____</p>
<p>COMMENTS</p>	

REVIEWER dm

DATE 10/31/2003

TELEPHONE NO. (703) 3082215

ATTACHMENT TO PAPER NO. 55

138143

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

PTO Draftpersons review all originally filed drawings regardless of whether they are designated as formal or informal. Additionally, patent Examiners will review the drawings for compliance with the regulations. Direct telephone inquiries concerning this review to the Drawing Review Branch, 703-305-8404.

The drawings filed (insert date) 10/15/93, are
 A. ☒ not objected to by the Draftsperson under 37 CFR 1.84 or 1.152.
 B. ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 as indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawings must be submitted according to the instructions on the back of this Notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:
 Black ink. Color.
☐ Not black solid lines. Fig(s) _____
☐ Color drawings are not acceptable until petition is granted.

2. PHOTOGRAPHS. 37 CFR 1.84(b)
☐ Photographs are not acceptable until petition is granted.

3. GRAPHIC FORMS. 37 CFR 1.84 (d)
☐ Chemical or mathematical formula not labeled as separate figure. Fig(s) _____
☐ Group of waveforms not presented as a single figure, using common vertical axis with time extending along horizontal axis. Fig(s) _____
☐ Individuals waveform not identified with a separate letter designation adjacent to the vertical axis. Fig(s) _____

4. TYPE OF PAPER. 37 CFR 1.84(e)
☐ Paper not flexible, strong, white, smooth, nonshiny, and durable. Sheet(s) _____
☒ Erasures, alterations, overwritings, interlineations, cracks, creases, and folds not allowed. Sheet(s) 1-31 machine

5. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable paper sizes:
 21.6 cm. by 35.6 cm. (8 1/2 by 14 inches)
 21.6 cm. by 33.1 cm. (8 1/2 by 13 inches)
 21.6 cm. by 27.9 cm. (8 1/2 by 11 inches)
 21.0 cm. by 29.7 cm. (DIN size A4)
☐ All drawing sheets not the same size. Sheet(s) _____
☐ Drawing sheet not an acceptable size. Sheet(s) _____

6. MARGINS. 37 CFR 1.84(g): Acceptable margins:

Paper size					
21.6 cm. X 35.6 cm. (8 1/2 X 14 inches)	21.6 cm. X 33.1 cm. (8 1/2 X 13 inches)	21 cm. X 27.9 cm. (8 1/2 X 11 inches)	21 cm. X 29.7 cm. (DIN Size A4)		
T 5.1 cm. (2")	2.5 cm. (1")	2.5 cm. (1")	2.5 cm.		
L .64 cm. (1/4")	.64 cm. (1/4")	.64 cm. (1/4")	2.5 cm.		
R .64 cm. (1/4")	.64 cm. (1/4")	.64 cm. (1/4")	1.5 cm.		
B .64 cm. (1/4")	.64 cm. (1/4")	.64 cm. (1/4")	1.0 cm.		

Margins do not conform to chart above.

Sheet(s) 1-31
 Top (T) _____ Left (L) X Right (R) X Bottom (B) X

7. VIEWS. 37 CFR 1.84(h)
 REMINDER: Specification may require revision to correspond to drawing changes.

☐ All views not grouped together. Fig(s) _____
☐ Views connected by projection lines. Fig(s) _____
☐ Views contain center lines. Fig(s) _____

Partial views. 37 CFR 1.84(h)(2)

☐ Separate sheets not linked edge to edge. Fig(s) _____
☐ View and enlarged view not labeled separately. Fig(s) _____
☐ Long view relationship between different parts not clear and unambiguous. 37 CFR 1.84(h)(2)(ii) Fig(s) _____

Sectional views. 37 CFR 1.84(h)(3)

☐ Hatching not indicated for sectional portions of an object. Fig(s) _____
☐ Hatching of regularly spaced oblique parallel lines not spaced sufficiently. Fig(s) _____
☐ Hatching not at substantial angle to surrounding axes or principal lines. Fig(s) _____
☐ Cross section not drawn same as view with parts in cross section with regularly spaced parallel oblique strokes. Fig(s) _____
☐ Hatching of juxtaposed different elements not angled in a different way. Fig(s) _____

Alternate position. 37 CFR 1.84(h)(4)

☐ A separate view required for a moved position. Fig(s) _____

Modified forms. 37 CFR 1.84(h)(5)

☐ Modified forms of construction must be shown in separate views. Fig(s) _____

8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)

☐ View placed upon another view or within outline of another. Fig(s) _____
☐ Words do not appear in a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____

9. SCALE. 37 CFR 1.84(k)

☐ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____
☐ Indication such as "actual size" or "scale 1/2" not permitted. Fig(s) _____
☐ Elements of same view not in proportion to each other. Fig(s) _____

10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l)

☒ Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (except for color drawings). Fig(s) 1-60

11. SHADING. 37 CFR 1.84(m)

☐ Shading used for other than shape of spherical, cylindrical, and conical elements of an object, or for flat parts. Fig(s) _____
☐ Solid black shading areas not permitted. Fig(s) 54, 53, 58

12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)

☒ Numbers and reference characters not plain and legible. 37 CFR 1.84(p)(1) Fig(s) 1-60
☐ Numbers and reference characters used in conjunction with brackets, inverted commas, or enclosed within outlines. 37 CFR 1.84(p)(1) Fig(s) _____
☐ Numbers and reference characters not oriented in same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____
☒ English alphabet not used. 37 CFR 1.84(p)(2) Fig(s) _____
☒ Numbers, letters, and reference characters do not measure at least .32 cm. (1/8 inch) in height. 37 CFR(p)(3) Fig(s) 1-60

13. LEAD LINES. 37 CFR 1.84(q)

☐ Lead lines cross each other. Fig(s) _____
☐ Lead lines missing. Fig(s) _____
☐ Lead lines not as short as possible. Fig(s) _____

14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(i)

☒ Number appears in top margin. Fig(s) 62-66
☐ Number not larger than reference characters. Fig(s) _____
☐ Sheets not numbered consecutively, and in Arabic numerals, beginning with number 1. Sheet(s) _____

15. NUMBER OF VIEWS. 37 CFR 1.84(u)

☐ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____
☐ View numbers not preceded by the abbreviation Fig. Fig(s) _____
☐ Single view contains a view number and the abbreviation Fig. Fig(s) _____
☐ Numbers not larger than reference characters. Fig(s) _____

16. CORRECTIONS. 37 CFR 1.84(w)

☐ Corrections not durable and permanent. Fig(s) _____

17. DESIGN DRAWING. 37 CFR 1.152

☐ Surface shading shown not appropriate. Fig(s) _____
☐ Solid black shading not used for color contrast. Fig(s) _____

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in ABANDONMENT of the application.